

**REMARKS/ARGUMENTS**

Claims 1-31 are pending in the present application. Claims 24-31 have been withdrawn from consideration and may be made the subject of divisional or continuation applications, to be filed at any time during the pendency of the present application. Claims 1, 2 and 18 have been amended. No new matter has been added to the amended claims.

Applicants respectfully request reconsideration of the subject application as amended herein. This Amendment is submitted in response to the Office Action dated July 12, 2007.

**STATUS OF THE CLAIMS**

Claims 2 and 10 are rejected under 35 U.S.C. §112, second paragraph (hereinafter, "Section 112, Par. 2"), as being indefinite.

Claims 1-6, 13-15 and 17 are rejected under 35 U.S.C. §102(b) (hereinafter, "Section 102(b)") as being anticipated by Dangman et al. (U.S. Pat. No. 5, 335, 373, hereinafter "Dangman").

Claims 1 and 13-16 are rejected under Section 102(b) as being anticipated by Shlenker et al. (U.S. Pat. No. 5, 338, 565, hereinafter "Shlenker").

Claims 1, 7 and 8 are rejected under U.S.C. § 102(e) (hereinafter "Section 102(e)") as being anticipated by Hourihan et al. (U.S. Pat. No. 6,913,758, hereinafter "Hourihan").

Claims 1-23 are rejected under 35 U.S.C. § 103(a) (hereinafter, "Section 103(a)") as being unpatentable Hourihan or Shlenker in view of Chou (U.S. Pub. No. 2003/0204893, hereinafter "Chou") and Dresdner et al. (U.S. Pat. No. 5,357,636, hereinafter "Dresdner").

Applicants respectfully traverse all rejections and request reconsideration for all of the pending claims in light of the amendments to the claims.

**Rejection Under Section 112, Par. 2**

In the office action, claim 2 was rejected for being indefinite for use of "such as" and "derivative". Applicant respectfully does not concede that the claim is indefinite, however in the interests of advancing examination of the present application, Applicant respectfully

amends claim 2 to remove use of “such as” and “derivative”. Accordingly, Applicant respectfully requests that the rejection against claim 2 under Section 112, par. 2 be withdrawn.

Claim 10 was rejected for being indefinite for allegedly having “no example of an antimicrobial substance that exists naturally in an edible plant”. Applicant respectfully directs Examiner’s attention to the specification on pages 15-18 in which Applicant discusses aloe vera and hydroxy acids such as, but not limited to, citric acid, mandelic acid, glycolic acid, tartaric acid and malic acid. These substances all exist naturally in an edible plant such as fruits, vegetables, nuts, sugar cane, flowers, etc. Furthermore, examples of antimicrobial substances existing naturally in edible plants are well known to those skilled in the art, e.g. edible flowers, fruits, herbs and spices, roots, including rose, lavender, orchid, garlic lily, olive leaf, green tea, tea tree, menthol, rosemary, sage, oregano, cinnamon, etc. As such, claim 10 is believed to be clear and allowable under Section 112, Par. 2. Accordingly, Applicant respectfully requests withdrawal of the rejection of claim 10.

#### **Rejection Under Section 102(b), Dangman**

Claims 1-6, 13-15 and 17 were rejected under Section 102(b) as being anticipated by Dangman.

#### **Dangman**

Dangman discusses a glove having an outer glove layer of a first material and an inner glove layer of a second material forming the walls of a compartment storing a liquid antiseptic composition (col. 10, line 68 to col. 11, line 7). It is an object of the invention to have the punctured glove wall “leak liquid antiseptic composition” to “flow onto the hand”. (col. 13, lines 8 to 13).

#### **Claim 1**

Independent claim 1, as amended, recites in part “a first layer of glove material, with an effective amount of antimicrobial agent therein the glove material or thereon an outer surface of the first layer”. The amendments are supported by Applicant’s specification throughout. Dangman does not teach or disclose such a limitation of the antimicrobial agent

“therein the glove material or thereon an outer surface of the first layer”. Rather, Dangman describes that the “antiseptic composition” is between the walls of the outer glove layer and inner glove layer. There is no antimicrobial agent therein the glove material and neither is there antimicrobial agent taught as being on an “outer surface of the first layer”. The antiseptic in Dangman is independently encased by the glove walls as shown in Fig. 1B.

Applicant further points out that Dangman neither provides for a second layer “configured to resist penetration by the anti-microbial agent” and “to resist contact between the anti-microbial agent”. In fact, the main object as taught in Dangman is to facilitate the contact of the antiseptic composition to flow onto the hand and into the hand wound through a puncture hole. Dangman extols the liquid nature of the antiseptic as facilitating the leaking of the antiseptic to reach the hand. As such, there is no teaching of a second layer to resist contact between the anti-microbial agent with the hand as required in amended claim 1. Accordingly since not all the claimed limitations of amended claim 1 are taught by Dangman, Applicant submits claim 1 is novel and patentable. Applicant respectfully requests withdrawal of the rejection of claim 1 under Section 102(b).

#### Dependent Claims 2-6, 13-15 and 17

Dependent claims 2-6, 13-15 and 17 include all limitations of their respective base claim 1. Accordingly, Applicant respectfully submits that these dependent claims are all allowable for at least the same reasons as their base claim 1. Furthermore, Applicant respectfully submits that these dependent claims are further allowable for the limitations that they themselves recite. For example, claim 17 recites that the “the antimicrobial agent is evenly dispersed on the outer surface of the first layer.” However, Dangman is devoid of any teaching that an antimicrobial agent is dispersed on the “outer surface of the first layer” but rather the antiseptic is between two layers, NOT on the outer surface of the first layer as required by claim 17.

Applicant respectfully disagrees with any assertions regarding the dependent claims from the Office Action. Any such assertions have been made moot by the above discussion of the base claim. Applicant respectfully requests withdrawal of the rejection of claims 2-6, 13-15 and 17 under Section 102(b) based on Dangman.

**Rejection Under Section 102(b), Shlenker**

Claims 1 and 13-16 were rejected under Section 102(b) as being anticipated by Shlenker.

**Shlenker**

Shlenker discusses applying a biocide barrier to a latex product such as a glove. A two layer latex glove with a biocide solution in between the layers is described. A former is dipped into liquid latex, then dipped into a solution containing biocide, and then dipped again into liquid latex. (col. 1, lines 55-60 and col. 2, lines 49- 56).

**Claim 1**

As mentioned, claim 1 has been amended to recite in part “a first layer of glove material, with an effective amount of antimicrobial agent therein the glove material or thereon an outer surface of the first layer”. Shlenker, like Dangman, fails to provide for an antimicrobial agent “therein the glove material”. Nowhere is this found in Shlenker as the “biocide” is only coated as a solution on the glove material, not “therein the glove material”. Neither does Shlenker teach or suggest the antimicrobial agent is “thereon an outer surface of the first layer” as the biocide is between two latex layers.

In addition, there is no teaching of a “second layer configured to resist...contact between the antimicrobial agent with the hand.” As Shlenker discusses with regard to its intended glove material used, “latex materials are known to possess imperfections in the form of pits, pores and holes which can facilitate transmission of microbes through the latex material” and the object of the applied biocide solution to the latex surface is for “substantially filling the pores and other imperfections of the latex” (col. 1, lines 42-44 and col. 3 lines 7-8). Accordingly, Shlenker fails to provide for such a “second layer configured to resist” the “contact of antimicrobial agent with the hand” as required by claim 1, by teaching a product which encourages contact of the “biocide solution” with the hand through its latex “pores and holes”. As such there is absolutely nothing to teach or suggest ALL the

required limitations of amended claim 1. Accordingly, claim 1 is believed novel and patentable over Shlenker.

**Dependent Claims 13-16**

Dependent claims 13-16 include all limitations of their respective base claim 1. Accordingly, Applicant respectfully submits that these dependent claims are all allowable for at least the same reasons as their base claim 1. Furthermore, Applicant respectfully submits that these dependent claims are further allowable for the limitations that they themselves recite. For example, claim 16 recites that the “the antimicrobial agent is evenly distributed within the first layer...” However, Shlenker is devoid of any teaching that an antimicrobial agent is distributed within the first layer. Rather, Shlenker describes a biocide solution on a surface of a latex layer, NOT distributed within as required by claim 16.

Applicant respectfully requests withdrawal of the rejection of claims 13-16 under Section 102(b) based on Shlenker.

**Rejection Under Section 102(e), Hourihan**

Claims 1, 7 and 8 were rejected under Section 102(e) as being anticipated by Hourihan.

**Hourihan**

Hourihan describes a multiple, long-term use antimicrobial glove, preferably a household glove (col. 2, line 25-26). The long-term use glove is “removed after use and typically stored in a dark warm place such as a drawer, a cabinet or a closet”. (col. 3, lines 14-16). The glove is “formed from one or more layers..., with each layer comprising a latex based matrix with an antimicrobial agent, ...homogenously incorporated therein.” (col. 2, lines 63-67).

**Claim 1**

Amended claim 1 recites in part, “A disposable protective glove comprising:... a second layer, to be closer to a hand than the first layer, when the glove is worn on the hand,

the second layer configured to resist, when the glove is worn, penetration by the anti-microbial agent and thereby to resist contact between the anti-microbial agent with the hand.” Hourihan does not teach or disclose such required limitations. First, Hourihan is not intended as a “disposable protective glove”, but rather teaches a repeated use, long term use glove stored for reuse in dark warm places. Therefore, Hourihan is not concerned with the “disposable protective glove” as described in Applicant’s claims.

Moreover, Hourihan fails to teach or suggest “a second layer configured to resist, when the glove is worn, penetration by the anti-microbial agent and thereby to resist contact between the anti-microbial agent with the hand”. While Hourihan describes a long-term use glove of multiple layers, there is simply no “second layer” to resist contact between the anti-microbial agent with the hand. Hourihan teaches “each layer comprising a latex-based matrix with an antimicrobial agent...homogenously incorporated therein.” (col. 2, lines 64-67). Every layer is therefore taught to have the antimicrobial agent incorporated therein and thereby contact the user’s hand. Hourihan is devoid of teaching or suggesting “a second layer configured to resist,” “penetration by the anti-microbial agent” of the “first layer”.

As such, there is NO teaching or suggestion of the configuration of the “second layer” “to resist contact between the anti-microbial agent with the hand” as required of amended claim 1. Therefore, since not ALL the claimed limitations of claim 1 are taught by Hourihan, amended claim 1 is believed novel and patentable.

#### Dependent Claims 7-8

Dependent claims 7-8 include all limitations of their respective base claim 1. Accordingly, Applicant respectfully submits that these dependent claims are all allowable for at least the same reasons as are their respective base claim. Furthermore, Applicant respectfully submits that these dependent claims are further allowable for the limitations that they themselves recite. For example, the limitation of claim 7 in which “a preparation disposed on the interior surface” of the second layer, “the preparation includes a buffer” are no where found in Hourihan (emphasis added). There is no preparation taught as “disposed on the inner surface” of a second layer in Hourihan, and neither is there a buffer in such

preparation taught. At most, Hourihan describes a “ph stabilizer” “*in the glove compound*” itself, NOT in a preparation applied to an interior surface of the second layer.

As such, Applicant respectfully requests withdrawal of the rejection against claim 7-8 under Section 102(e) based on Hourihan.

**Rejection Under Section 103(a), Hourihan or Shlenker in view of Chou and Dresdner**

Claims 1-23 were rejected under Section 103(a) as being unpatentable over Hourihan or Shlenker in view of Chou and Dresdner.

**Independent Claim 1**

Independent claim 1 has been amended as discussed above to recite in part, “*a first layer of glove material with an effective amount of antimicrobial agent therein the glove material or thereon an outer surface of the first layer*; and a second layer, to be closer to a hand than the first layer, when the glove is worn on the hand, the second layer configured to resist, when the glove is worn, penetration by the anti-microbial agent and thereby to resist contact between the anti-microbial agent with the hand.” (emphasis added). The cited references fail to teach each and every the element of amended claim 1.

In contrast to Examiner’s assertion that Shlenker discloses a glove with a “middle layer with antimicrobial agent therein”, Applicant respectfully points to the teaching in Shlenker that it’s “biocide solution” is NOT therein “a first layer of glove material”. Rather, the biocide solution is applied to a surface of a latex, and thereby resides between two layers of latex. Neither is there any teaching in Shlenker of a “second layer configured to resist contact between the anti-microbial agent with the hand”. While Shlenker may describe its biocide solution serving as a barrier against the transmission of microbes, there is nowhere disclosed that the second layer is configured to resist contact between this “biocide solution” and the hand. In fact, Shlenker contemplates the “biocide solution” to touch the hand since it describes its glove material to have holes and imperfections which the biocide solution is to fill in. As such, there is simply no teaching of all the claimed limitation of amended claim 1.

Neither does Hourihan provide for the deficiencies, since Hourihan is devoid of teaching of the “second layer configured to resist, when the glove is worn, penetration by the

anti-microbial agent and thereby to resist contact between the anti-microbial agent with the hand.” Hourihan teaches that “each layer” has the anti-microbial agent homogeneously distributed throughout the glove material. As such, there exists no “second layer” in Hourihan, as configured to resist the penetration by the anti-microbial agent of the first layer and resist contact to the hand as required in amended claim 1. Accordingly, both Shlenker and Hourihan together, fail to teach each and every claim limitation of amended claim 1.

Moreover, neither is there any motivation to combine the teachings of Shlenker with Hourihan, to obtain the limitation of claim 1. Neither Shlenker nor Hourihan are concerned with the antimicrobial agent from the first layer contacting the hand, but rather allow for or even encourage such contact with the hand. Accordingly, there is no suggestion or motivation to combine such references to achieve the limitations of Applicant’s claim 1.

Furthermore, neither Chou nor Dredner provide for the deficiencies as mentioned above and therefore not ALL the claimed limitations are taught. Dredner may teach a multilayer glove but fails to provide the required limitations of claim 1. As mentioned, there is no teaching of a disposable protective glove having an “antimicrobial agent” of a “first layer” and a “second layer configured to resist, when the glove is worn, penetration by the anti-microbial agent and thereby to resist contact between the anti-microbial agent with the hand.” Neither is there any motivation or suggestion to combine Chou with Hourihan as suggested by Examiner where Chou is concerned with a disposable protective glove, and not a long term, multiple use glove stored in dark places as intended by Hourihan. Hourihan therefore teaches away from a disposable glove by particular teaching a multiple use, long term, durable glove put away in storage and then re-used.

Accordingly, Applicant respectfully submits that amended claim 1 is novel and nonobvious over Hourihan or Shlenker in view of Chou and Dredner since at least not all the limitations have been taught or suggested by the cited references. Dependent claims 2-17 are novel and nonobvious for at least the same reasons as their base claim 1 and also for the additional elements they each recite.

Accordingly, Applicant respectfully requests withdrawal of the rejection of amended claim 1 and respective dependent claims under Section 103(a).

Independent claim 18

Claim 18 and its dependent claims are also allowable over Hourihan or Shlenker in view of Chou and Dresdner for similar reasons. Claim 18 has been amended to recite in part, “an outer layer having an antimicrobial agent distributed within or applied onto an outer surface of the outer layer” and “wherein the inner layer serves as a barrier between the skin and the outer layer so to resist developing of antimicrobial resistance in microbes on the skin”. Such limitations are no where shown to be taught in the references cited.

As mentioned, Shlenker teaches a biocide solution between two layers of latex and neither is it distributed within or applied onto an outer surface of a first layer. Further, both Hourihan and Shlenker allow for contact between their “biocide” or “antimicrobial agent”. In no manner do these references teach or suggest an inner layer “serves as a barrier between the skin and the outer layer so to resist developing of antimicrobial resistance in microbes on the skin”. Neither does Chou nor Dresdner provide for the deficiencies as discussed above. Accordingly, for at least these reasons, amended claim 18 is novel and patentable over the cited references.

Dependent claims 19-23 are novel and nonobvious for at least the same reasons as their base claim 18 and also for the additional elements they each recite. For example, claim 19 recites that “the antimicrobial agent is distributed within the outer layer *and* applied onto the outer layer.”(emphasis added). Hourihan or Shlenker in view of Chou and Dresdner in no manner teach of such a configuration of a disposable protective glove.

Accordingly, Applicant respectfully requests withdrawal of the rejection of amended claim 18 and respective dependent claims under Section 103(a).

The above-discussed remarks are believed to place the present Application in condition for allowance and action towards that effect is respectfully requested. Should the Examiner have any questions regarding the above amendments, the Examiner is requested to telephone Applicant's representative at the number listed below.

Respectfully submitted,

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